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NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	FEB 25	CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered
NEWS	4	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	5	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	6	FEB 28	MEDLINE/LMEDLINE reloaded
NEWS	7	MAR 02	GBFULL: New full-text patent database on STN
NEWS	8	MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	9	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	10	MAR 22	KOREAPAT now updated monthly; patent information enhanced
NEWS	11	MAR 22	Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS	12	MAR 22	PATDPASPC - New patent database available
NEWS	13	MAR 22	REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS	14	APR 04	EPFULL enhanced with additional patent information and new fields
NEWS	15	APR 04	EMBASE - Database reloaded and enhanced
NEWS	16	APR 18	New CAS Information Use Policies available online
NEWS	17	APR 25	Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAplus and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.
NEWS	18	APR 28	Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAplus
NEWS	19	MAY 23	GBFULL enhanced with patent drawing images
NEWS	20	MAY 23	REGISTRY has been enhanced with source information from CHEMCATS
NEWS	21	MAY 26	STN User Update to be held June 6 and June 7 at the SLA 2005 Annual Conference
NEWS	22	JUN 06	STN Patent Forums to be held in June 2005
NEWS	23	JUN 06	The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available

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FILE 'HOME' ENTERED AT 07:24:59 ON 10 JUN 2005

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 07:25:10 ON 10 JUN 2005
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DICTIONARY FILE UPDATES: 9 JUN 2005 HIGHEST RN 852020-24-7

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****
* *
* The CA roles and document type information have been removed from *
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* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

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=> file caplus

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FULL ESTIMATED COST	0.43	0.64

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FILE COVERS 1907 - 10 Jun 2005 VOL 142 ISS 25
FILE LAST UPDATED: 9 Jun 2005 (20050609/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> solid liquid
        963770 SOLID
        273646 SOLIDS
       1165923 SOLID
                 (SOLID OR SOLIDS)
        684284 LIQUID
        122774 LIQUIDS
        777118 LIQUID
                 (LIQUID OR LIQUIDS)
        953591 LIQ
         90892 LIQS
        988991 LIQ
                 (LIQ OR LIQS)
       1369240 LIQUID
                 (LIQUID OR LIQ)
L1       27615 SOLID LIQUID
                 (SOLID(W)LIQUID)

=> liquid solid
        684284 LIQUID
        122774 LIQUIDS
        777118 LIQUID
                 (LIQUID OR LIQUIDS)
        953591 LIQ
         90892 LIQS
        988991 LIQ
                 (LIQ OR LIQS)
       1369240 LIQUID
                 (LIQUID OR LIQ)
        963770 SOLID
        273646 SOLIDS
       1165923 SOLID
                 (SOLID OR SOLIDS)
L2       20709 LIQUID SOLID
                 (LIQUID(W)SOLID)

=> l1 or l2
L3       43992 L1 OR L2

=> reaction
       2806844 REACTION
       2025116 REACTIONS
L4     3753322 REACTION
                 (REACTION OR REACTIONS)

=> l3(l)l4
L5        4694 L3(L)L4
```

```
=> ether or ester
        461819 ETHER
        141927 ETHERS
        520226 ETHER
                 (ETHER OR ETHERS)
        562068 ESTER
        419051 ESTERS
        784851 ESTER
                 (ESTER OR ESTERS)
L6     1199985 ETHER OR ESTER

=> acid anhydride
       3987175 ACID
       1478723 ACIDS
       4465898 ACID
                 (ACID OR ACIDS)
        196206 ANHYDRIDE
         31405 ANHYDRIDES
        206289 ANHYDRIDE
                 (ANHYDRIDE OR ANHYDRIDES)
L7       24236 ACID ANHYDRIDE
                 (ACID(W)ANHYDRIDE)

=> l6 or l7
L8     1214708 L6 OR L7
 75% OF LIMIT FOR TOTAL ANSWERS REACHED

=> l8 and l5
L9         323 L8 AND L5

=> 1891)15
UNMATCHED RIGHT PARENTHESIS 'L89L)L5'
The number of right parentheses in a query must be equal to the
number of left parentheses.

=> l8(l)l5
L10        215 L8(L)L5

=> salt
        739656 SALT
        575425 SALTS
L11    1102160 SALT
                 (SALT OR SALTS)

=>

=> l10 and l11
L12         52 L10 AND L11

=> d l12 42-52 ti

L12  ANSWER 42 OF 52  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Quaternary ammonium salts as catalysts in nucleophilic
     substitution reactions in a solid-liquid-two phase system

L12  ANSWER 43 OF 52  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Detergents with nonseparating peroxide salts

L12  ANSWER 44 OF 52  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Condensation of esters by branched organomagnesium compounds. XIV.
     Physicochemical investigation of an intermediate obtained during the
     synthesis of β-hydroxy esters by a magnesium complex of tert-butyl
     acetate
```

L12 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Fibrous or porous textile material from oriented organic polymers

L12 ANSWER 46 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Effect of solid phase on foam stability

L12 ANSWER 47 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI The insecticidal principles of Haplophyton cimicidum. I. Haplophytine

L12 ANSWER 48 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Oxazoles and oxazolones

L12 ANSWER 49 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Strychnine alkaloids. XXXIII. Degradation of quaternary **salts** of vomicine and desoxyvomicine

L12 ANSWER 50 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Cyclizing polymerization of acetylene. I. Cyclo-octatetraene

L12 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Systems with recurrent fusion curves. I

L12 ANSWER 52 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI The constitution of nitrogen tetroxide and the products that it forms with limited amounts of water

=> d l12 42 ti fbib abs

L12 ANSWER 42 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Quaternary ammonium **salts** as catalysts in nucleophilic substitution reactions in a solid-liquid-two phase system
AN 1978:66293 CAPLUS
DN 88:66293
TI Quaternary ammonium **salts** as catalysts in nucleophilic substitution reactions in a solid-liquid-two phase system
AU Jonczyk, Andrzej; Ludwikow, Maria; Makosza, Mieczyslaw
CS Inst. Org. Chem. Technol., Tech. Univ. Warsaw, Warsaw, Pol.
SO Angewandte Chemie (1978), 90(1), 58
CODEN: ANCEAD; ISSN: 0044-8249
DT Journal
LA German
AB Aliquot 336 (tech. methyltrioctylammonium chloride) was used as a catalyst in the **solid-liquid** nucleophilic substitution **reaction** of K and Na **salts** with alkyl halides and methanesulfonate **esters** in organic solvents (MeCN and CH2Cl2).

=> d l12 31-41 ti

L12 ANSWER 31 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Substitution and elimination reactions of poly(epichlorohydrin) and poly(2-chloroethyl vinyl ether) using phase transfer catalysis

L12 ANSWER 32 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Poly(oxyalkylene) ethers

L12 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Substitution reaction of poly((chloromethyl)styrene) with **salts** of various nucleophilic reagents using phase-transfer catalysts

L12 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Substitution reaction of poly(chloromethylstyrene) with some nucleophilic reagents using triphase transfer catalysis

L12 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Substitution reactions of poly[2-(2-chloro-5-nitrobenzoyloxy)ethyl methacrylate] and poly[2-(4-chloro-3-nitrobenzoyloxy)ethyl methacrylate] with some nucleophilic reagents using phase transfer catalysis

L12 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Esterification reaction of poly[(chloromethyl)styrene] with **salts** of carboxylic acid using phase-transfer catalysts

L12 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solid cationic polymers

L12 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chemistry of crown ethers. XVII. Triphase catalysis by immobilized benzo-18-crown-6

L12 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Comparison between the role of water and that of a crown **ether** in the context of the Wittig **reaction** in **liquid-solid** heterogeneous media

L12 ANSWER 40 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Stereoselective synthesis of optically active dictyopterenes A and B and their geometrical isomers

L12 ANSWER 41 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Enantioselective ester synthesis in the presence of optically active polymers

=> d l12 20-30 ti

L12 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Michael **reaction** of chloro **esters** in a two-phase **solid-liquid** system

L12 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthesis of crosslinked macrocyclic polyethers with pendant quaternary ammonium **salt**

L12 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthesis of natural esters of substituted cinnamic acids

L12 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Polymer supported phase-transfer catalysis and catalysts

L12 ANSWER 24 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Palladium-catalyzed desulfonylative coupling of arylsulfonyl chlorides with acrylate esters under solid-liquid phase-transfer conditions

L12 ANSWER 25 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Intensification of heterogeneous reactions through hydrotropy: alkaline hydrolysis of esters and oximation of cyclododecanone

L12 ANSWER 26 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Asymmetric induction under two-phase conditions. (I). Asymmetric induction in the Gabriel reaction by using two-phase system - synthesis of optically active amino acids

L12 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Iminocarbonic acid alkyl ester dialkylamides

L12 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxycyclohexanol

L12 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Two-phase reaction of 1-bromooctane with sodium acetate and potassium acetate catalyzed by bisquaternary ammonium **salts**

L12 ANSWER 30 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Functionalized ethylene oligomers as phase-transfer catalysts

=> d l12 20,28,29 ti fbib abs

L12 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Michael **reaction** of chloro **esters** in a two-phase **solid-liquid** system
AN 1992:173586 CAPLUS
DN 116:173586
TI Michael **reaction** of chloro **esters** in a two-phase **solid-liquid** system
AU Yan, Chaoguo; Kong, Qiangzhi; Lu, Wenxing; Wu, Jitao
CS Dep. Chem., Yangzhou Teach. Coll., Jiangsu, 225002, Peop. Rep. China
SO Chinese Chemical Letters (1991), 2(10), 753-4
CODEN: CCLEE7; ISSN: 1001-8417
DT Journal
LA English
OS CASREACT 116:173586
AB The Michael addition of α-chloro **esters** to α,β-unsatd. systems was catalyzed by tetraalkylammonium **salts** in a two-phase **solid-liquid** system, and some polysubstituted cyclopropanes were easily prepared Thus, Michael **reaction** of ClCH2CO2Et with CH2:CHCO2Et in the presence of PhCH2NEt3Cl as phase-transfer catalyst in DMF as solvent and K2CO3 gave 66% di-Et cyclopropane-1,2-dicarboxylate.

L12 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxycyclohexanol
AN 1986:442606 CAPLUS
DN 105:42606
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxycyclohexanol
AU Depreux, P.; Marcincal-Lefebvre, A.
CS Lab. Chim. Org., Fac. Pharm. Lille, Lille, 59045, Fr.
SO Canadian Journal of Chemistry (1986), 64(3), 626-32
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA French
OS CASREACT 105:42606
AB Amino **ethers** of trans-2-phenoxycyclohexanol were prepared by methods involving anhydrous conditions (sodium alkoxides in xylene) or phase transfer catalysis (PTC) conditions (liquid-liquid or **solid-liquid** two-phase systems). In the liquid-liquid two-phase system, when no catalyst was added, the **reaction** proceeds with comparable or even better yields than with some PTC catalysts, a quaternary **salt** being formed in situ. The deprotonation of the alc. takes place at the interface, since there was no OH- extraction in organic medium and the yield depends on the stirring speed. In the presence of aliquat, the yield does not change with the organic concentration of the catalyst. Statistical correlations

obtained between the variations in yield and several other parameters were good.

L12 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Two-phase reaction of 1-bromooctane with sodium acetate and potassium acetate catalyzed by bisquaternary ammonium **salts**
AN 1986:68420 CAPLUS
DN 104:68420
TI Two-phase reaction of 1-bromooctane with sodium acetate and potassium acetate catalyzed by bisquaternary ammonium **salts**
AU Schiefer, H.; Beger, J.; Lorenz, U.
CS Sekt. Chem., Bergakad. Freiberg, DDR-9200, Ger. Dem. Rep.
SO Journal fuer Praktische Chemie (Leipzig) (1985), 327(3), 383-98
CODEN: JPCEAO; ISSN: 0021-8383
DT Journal
LA German
OS CASREACT 104:68420
AB trans-R2N+R1CH2CH:CHCH2N+R2R1 2X- (I, R = Me, Et, Bu; R1 = Bu, octyl, dodecyl, hexadecyl, PhCH2; X = Cl, Br) (diquats) were prepared either from trans-R2NCH2CH:CHCH2NR2 and R1X or from trans-1,4-dibromo-2-butene and R2NR1. The **reaction** of Me(CH2)7Br with NaOAc or KOAc in the liquid-liquid 2-phase system without addnl. solvent was catalyzed more effectively by the unsatd. diquats than by saturated diquats and monoquats. Most of the quats catalyze **ester** formation from NaOAc more effectively in the liquid-liquid system, but **ester** formation from KOAc more effectively in the **solid-liquid** system. KOAc was generally better than NaOAc in both systems.

=> d l12 9-19 ti

L12 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Combustion of ammonium nitrate-based compositions. Part 1. Mixtures of ammonium nitrate with catalysts and high explosives

L12 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of diaminodiphenyl ethers from aminophenols and chloronitrobenzenes

L12 ANSWER 11 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chromatographic optical resolution of racemic amines and amino acids by (1→6)-2,5-anhydro-3,4-di-O-methyl-d-glucitol bound on silica gel

L12 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Novel microporous solid "superacids": CsxH3-xPW12O40 (2 ≤ x ≤ 3)

L12 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Cyclophosphazenic polypodands as powerful cation complexing agents, efficient phase-transfer catalysts and anion activators

L12 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chromatographic optical resolution of racemic amine and amino acid **salts** by (1→6)-2,5-anhydro-3,4-di-o-methyl-D-glucitol bound on silica gel.

L12 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Crown **ether** catalyzed stereospecific synthesis of Z- and E-stilbenes by Wittig **reaction** in a **solid-liquid** two-phases system

L12 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synergism and antagonism in phase-transfer catalysis

L12 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of 2-(methylthio)-6-alkylphenyl ethers as intermediates for herbicides

L12 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synergism in liquid/solid phase-transfer catalysis

L12 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of perbenzyl carbohydrate derivatives

=> d l12 10,17-19 ti fbib abs

L12 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of diaminodiphenyl ethers from aminophenols and chloronitrobenzenes
AN 1997:618713 CAPLUS
DN 127:262519
TI Preparation of diaminodiphenyl ethers from aminophenols and chloronitrobenzenes
IN Horiuchi, Hiroshi; Shono, Hisashi; Hasegawa, Hideo
PA Teijin Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

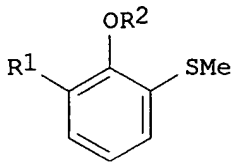
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09241225	A2	19970916	JP 1996-49867	19960307
			JP 1996-49867	19960307

AB Diaminodiphenyl **ethers** are prepared by condensation of aminophenols with chloronitrobenzenes in the presence of basic K compds. in DMF, removing resulting K **salts** from the **reaction** mixts. by **solid-liquid** separation, contacting the solns. with inorg. adsorbents to reduce solubilized K into ≤10 ppm (by weight), catalytic hydrogenation of the solns. in the presence of catalysts, and recovering the catalysts and DMF for recycling. M-aminophenol was refluxed with p-chloronitrobenzene and K2CO3 in DMF for 6 h, filtered, the filtrate treated with activated alumina at 25° for 2 h, filtered, and the filtrate was hydrogenated over Pd/C. The catalyst was recovered and repeatedly used in the same **reaction** 10 times in total without forming sticky Pd/C.

L12 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of 2-(methylthio)-6-alkylphenyl ethers as intermediates for herbicides
AN 1995:986658 CAPLUS
DN 124:116854
TI Preparation of 2-(methylthio)-6-alkylphenyl ethers as intermediates for herbicides
IN Inoe, Tsutomu; Yamaguchi, Masao; Takahashi, Atsushi
PA Nippon Soda Co, Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 07247267	A2	19950926	JP 1994-66651	19940310
			JP 1994-66651	19940310

OS CASREACT 124:116854; MARPAT 124:116854
GI



I

AB The title compds. I (R1 = alkyl; R2 = alkyl, aralkyl) (II), useful as intermediates for drugs and agrochems, especially for herbicides, are prepared by solid-liquid treatment of I (R1 is the same as in II; R2 = H) (III) with R2X (R2 = alkyl, aralkyl) or R22SO4 (R2 = lower alkyl) in the presence of bases and quaternary ammonium **salts**. A toluene solution of 8.62 g III (R1 = Me) (preparation given) was treated with an aqueous NaOH solution under azeotropic dehydration and the obtained crystal was treated with Bu4N+ Br- and Me2SO4 under stirring at room temperature for 3 h to give 6.60 g II (R1 = R2 = Me).

L12 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synergism in liquid/solid phase-transfer catalysis
AN 1995:622252 CAPLUS
DN 123:198191
TI Synergism in liquid/solid phase-transfer catalysis
AU Savyolova, Vera A.; Vakhitova, Lyubov N.; Magasinski, Aleksandr N.; Rybak, Vladimira V.; Panchenko, Boris V.
CS L. M. Litvinenko Inst. Phys. Org. Coal Chem., Natl. Acad. Sci. Ukraine, Donetsk, 340114, Ukraine
SO Mendeleev Communications (1995), (3), 123-4
CODEN: MENCEX; ISSN: 0959-9436
PB Russian Academy of Sciences
DT Journal
LA English
AB Powerful synergism in the hydrolysis **reaction** of p-nitrophenyl acetate in a **liquid/solid** system in the presence of the catalytic couple quaternary onium **salt**/crown **ether** has been detected.

L12 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of perbenzyl carbohydrate derivatives
AN 1994:54883 CAPLUS
DN 120:54883
TI Preparation of perbenzyl carbohydrate derivatives
IN Szeja, Wieslaw; Grynkiewicz, Grzegorz; Bieg, Tadeusz; Bogusiak, Jadwiga; Fokt, Izabela; Konopka, Miroslawa
PA Instytut Przemyslu Farmaceutycznego, Pol.
SO Pol., 9 pp. Abstracted and indexed from the unexamined application.
CODEN: POXXA7
DT Patent
LA Polish
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI PL 158083	B1	19920731	PL 1988-273529	19880705
			PL 1988-273529	19880705

OS CASREACT 120:54883

AB Carbohydrate derivs. are prepared by alkylation with benzyl halides such that the **reaction** is carried out in a two-phase liquid-liquid or **liquid-solid** system in which one phase consists of an inorg. base, preferably an alkali metal hydroxide possibly mixed with an alkali metal carbonate in the solid state or as an aqueous solution, especially a 1:4 mixture of solid sodium hydroxide and anhydrous potassium carbonate, with a small excess of benzyl halide, preferably benzyl chloride, in the presence of a tertiary amine or quaternary ammonium **salt**, preferably tetra-n-butylammonium hydrogen sulfate and also in the presence of a tertiary alc., especially tert-Bu or tert-amyl alcs., in an aromatic hydrocarbon medium, especially benzene or toluene, or in a halogenated aliphatic hydrocarbon, preferably methylene chloride or ethylene dichloride, or in an **ether**, preferably di-Et or di-Bu **ethers**, THF, or dioxane, or in a mixture of these solvents, possibly with added dipolar aprotic solvent, such as DMSO; after the **reaction** the benzylation product is isolated by known methods. Thus, alkylation of 1,2-O-isopropylidene-α-D-glucofuranose with PhCH2Cl in C6H6 containing tert-amyl alc., Bu4NHSO4, and 50% aqueous NaOH gave 81% 3,5,6-tri-O-benzyl-1,2-O-isopropylidene-α-D-glucofuranose.

=> d l12 1-8 ti

L12 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Novelties of solid-liquid phase transfer catalyzed synthesis of o-nitrodiphenyl ether

L12 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solvent-free reactions as green chemistry procedures for the synthesis of cosmetic fatty esters

L12 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthesis of novel amphiphilic pyridinylboronic acids

L12 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer catalyzed etherification for synthesizing allyl phenyl ether in solid-liquid-liquid system

L12 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer catalysis in oxidation of cyclohexene with potassium permanganate. II. Phase-transfer catalytic processes

L12 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Catalysis by porous heteropoly compounds

L12 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Onium **salts** and crown compounds in phase transfer catalysis

L12 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Kinetics of etherification of ethyl 2-bromoisobutyrate via solid/liquid phase transfer catalysis

=> d l12 1,2,4,8 ti fbib abs

L12 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Novelties of solid-liquid phase transfer catalyzed synthesis of o-nitrodiphenyl ether
AN 2003:1012986 CAPLUS
DN 141:140051

TI Novelties of solid-liquid phase transfer catalyzed synthesis of o-nitrodiphenyl ether
AU Yadav, Ganapati D.; Subramanian, S.
CS University Institute of Chemical Technology, Department of Chemical Engineering, University of Mumbai, Mumbai, 400019, India
SO Journal of Molecular Catalysis A: Chemical (2004), 209(1-2), 75-82
CODEN: JMCCF2; ISSN: 1381-1169
PB Elsevier Science B.V.
DT Journal
LA English
AB O-Nitrodiphenyl **ether** is an important intermediate in the fine chemical industry and used in a number of drugs. This **ether** is typically prepared from o-chloronitrobenzene (OCNB) by condensing with alkali metal phenoxides in toluene or xylene in presence of copper or cuprous chloride and the process requires a high temperature to initiate the formation of cuprous **salt** of phenol. Once initiated the **reaction** is exothermic and can sometimes become uncontrolled leading to the formation of tarry masses. In the current work synthesis of o-nitrodiphenyl **ether** was accomplished by reacting o-chloronitrobenzene with solid potassium phenoxide using tetra-n-butylphosphonium bromide as a catalyst under **solid-liquid** phase transfer catalysis (S-L PTC). The advantages of S-L PTC are that the **reaction** is conducted at controllable temps., the rates of **reaction** are increased by orders of magnitude and the **reaction** is 100% selective, in comparison with the liquid-liquid (L-L) PTC which is very slow and produces byproducts. The mechanism based on homogeneous solubilization of solid resulting in the formation of an active ion-pair with the nucleophile was found to prevail in the system. A complete theor. anal. is done to determine both the rate constant and equilibrium constant from the same set of data. The **reaction** is intrinsically kinetically controlled.
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solvent-free reactions as green chemistry procedures for the synthesis of cosmetic fatty esters
AN 2003:785394 CAPLUS
DN 141:93955
TI Solvent-free reactions as green chemistry procedures for the synthesis of cosmetic fatty esters
AU Villa, C.; Mariani, E.; Loupy, A.; Grippo, C.; Grossi, G. C.; Bargagna, A.
CS Dipartimento di Scienze, Farmaceutiche dell'Universita, Genoa, Italy
SO Green Chemistry (2003), 5(5), 623-626
CODEN: GRCHFJ; ISSN: 1463-9262
PB Royal Society of Chemistry
DT Journal
LA English
AB **Solid-liquid** solvent-free phase transfer catalysis (PTC) and acidic catalysis in dry media were applied, as green chemical procedures, to the synthesis under mild conditions of long chain aliphatic **esters** of interest in the cosmetic field. The **reactions** were performed under conventional heating and microwave activation, analyzing the profiles of the temperature increases during the **reactions** and studying the yields at different **reaction** times. The selected **esters** were obtained with very good yields within short **reaction** times. Using Aliquat 336 as phase transfer agent, the results showed lower yields under classical heating for very short **reaction** times (5 min), but usually comparable to the yields obtained under microwave heating extending the **reaction** time up to 15 min. The simple heterogeneous mixture of reagents with catalytic amount of neat p-toluenesulfonic acid (PTSA) under classical heating leads to

good results, similar to those obtained under microwave activation with regards to yields and **reaction** times (10 min for microwave activation/15 min for oil bath).

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer catalyzed etherification for synthesizing allyl phenyl ether in solid-liquid-liquid system
AN 2002:874993 CAPLUS
DN 138:305745
TI Phase-transfer catalyzed etherification for synthesizing allyl phenyl ether in solid-liquid-liquid system
AU Yang, Hung-Ming; Li, Chih-Ch'ing
CS Department of Chemical Engineering, National Chung Hsing University, Taichung, Taiwan, 402, Peop. Rep. China
SO Shiyou Jikan (2002), 38(3), 27-37
CODEN: SYCKE4; ISSN: 1022-9671
PB Chinese Petroleum Institute
DT Journal
LA Chinese
OS CASREACT 138:305745
AB The kinetics of **solid-liquid**-liquid phase-transfer catalyzed etherification for synthesizing specialty chemical, allyl Ph **ether**, in a stirred batch reactor was investigated in the present study. The solid catalysts were prepared from immobilizing different alkyl amines as the active sites onto macroporous or microporous polystyrene copolymer beads. The product yield of the etherification of sodium phenoxide with allyl bromide was achieved above 75% within 2 h at 60° over the immobilized catalysts. From the exptl. results, the external mass transfer resistance can be ignored when the agitation speed exceeds 350 rpm. The apparent **reaction** rate increases with decreasing catalyst particle size, exhibiting the overall **reaction** controlled by both internal diffusion and intrinsic organic **reaction** . The activity of macroporous catalyst is found better than that of microporous one for the same degree of crosslinking of the support, revealing that the **reaction** rate was influenced by the structure of the catalyst significantly. Increasing the degree of crosslinking of the support leads to the reduction of solvent swelling and the contact of reactants due to the more rigid network of the support. The order of activity for different active sites of macroporous catalyst was tri-Bu amine > tri-Et amine ≈ trioctyl amine. The apparent activation energies were also estimated from the results at different **reaction** temps. The catalytic activity was gradually reduced, however, within 5% for recovered catalyst, demonstrating the satisfactory stability of the catalyst. The kinetic model for triphase catalysis was also set up and the pseudo-first-order **reaction** was applied to describe the etherification successfully. The present study can be used as the basis for designing the etherification **reaction** process.

L12 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Kinetics of etherification of ethyl 2-bromoisobutyrate via solid/liquid phase transfer catalysis
AN 1998:749013 CAPLUS
DN 130:66090
TI Kinetics of etherification of ethyl 2-bromoisobutyrate via solid/liquid phase transfer catalysis
AU Yang, Hung-Ming; Chen, Tsan-Ming
CS Department of Chemical Engineering, National Chung-Hsing University, Taichung, 402, Taiwan
SO Journal of the Chinese Institute of Chemical Engineers (1998), 29(5), 367-374
CODEN: JCICAP; ISSN: 0368-1653

PB Chinese Institute of Chemical Engineers
DT Journal
LA English
AB Phase transfer catalyzed **reactions** such as esterification, hydrolysis, and halide exchange were reported to conduct successfully in **solid-liquid** phase transfer catalysis (SLPTC). In the present work, the kinetics for synthesizing **ether-esters** from the etherification of Et 2-bromoisobutyrate under **solid-liquid** phase transfer conditions was investigated. The **reaction** was carried out in a stirred batch reactor with isothermal jacket, using potassium 4-benzyloxyphenoxide as the solid reactant. The potassium **salt** was prepared from deprotonation of 4-benzyloxyphenol with potassium hydroxide in aqueous solution Using the **solid/liquid** system, the usual hydrolysis of **ester** compds. in alkali aqueous/organic phases can be prevented under anhydrous conditions. High conversion of etherification of Et 2-bromoisobutyrate in organic solvent can be obtained. The exptl. data were described by pseudo-first-order kinetics. Various quaternary 'onium **salts** were employed to compare their efficiencies for etherification. Effects of agitation speed, **reaction** temperature, organic solvent and small quantities of water addition were explored to find the optimal operating conditions. From the exptl. results, the **reaction** rates are not influenced by the stirring speed when the agitation speed exceeds 350 rpm. The **reaction** rate increases with increasing the polarity of solvent. The temperature effects as well as the activation energy for various phase transfer catalysts were investigated. The activation energy for TBAB was calculated to be 15.2 Kcal/mol. Small quantities of water addition can also enhance the reactivity of catalyst.
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d cost

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
CONNECT CHARGES	8.19	8.71
NETWORK CHARGES	1.26	1.38
SEARCH CHARGES	18.90	18.90
DISPLAY CHARGES	48.44	48.44
FULL ESTIMATED COST	76.79	77.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.76	-8.76

IN FILE 'CAPLUS' AT 07:37:45 ON 10 JUN 2005

=> d his

(FILE 'HOME' ENTERED AT 07:24:59 ON 10 JUN 2005)

FILE 'REGISTRY' ENTERED AT 07:25:10 ON 10 JUN 2005

FILE 'CAPLUS' ENTERED AT 07:25:16 ON 10 JUN 2005
L1 27615 SOLID LIQUID
L2 20709 LIQUID SOLID
L3 43992 L1 OR L2
L4 3753322 REACTION
L5 4694 L3(L)L4
L6 1199985 ETHER OR ESTER

L7 24236 ACID ANHYDRIDE
L8 1214708 L6 OR L7
L9 323 L8 AND L5
L10 215 L8(L)L5
L11 1102160 SALT
L12 52 L10 AND L11

=> williamson
L13 1323 WILLIAMSON

=> l3 and l13
L14 18 L3 AND L13

=> d l14 10-18 ti

L14 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Crosslinked poly(N-vinylpyrrolidone) as solid cosolvent

L14 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solvating effect of copolymers of styrene with a poly(oxyethylene) chain macromer. Effect of the polymer support

L14 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Optimization of polymer-supported oligoethers as **solid-liquid** phase transfer catalysts

L14 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Block ethylene oxide-styrene copolymers as **solid-liquid** phase transfer catalysts

L14 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Nonsupported and resin-supported oligo(oxyethylenes) as **solid-liquid** phase-transfer catalysts. Effect of chain length and head-group

L14 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Mechanism of **solid-liquid** phase transfer catalysis by polymer-supported linear polyethers

L14 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Linear polymers and block copolymers as **solid-liquid** phase transfer catalysts

L14 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Reactions of organic anions. 86. Sodium and potassium carbonates: efficient strong bases in **solid-liquid** two-phase systems

L14 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Strychnine alkaloids. XXXIII. Degradation of quaternary salts of vomicine and desoxyvomicine

=> d l14 17 ti fbib abs

L14 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Reactions of organic anions. 86. Sodium and potassium carbonates: efficient strong bases in **solid-liquid** two-phase systems
AN 1979:21676 CAPLUS
DN 90:21676
TI Reactions of organic anions. 86. Sodium and potassium carbonates: efficient strong bases in **solid-liquid** two-phase

systems
AU Fedorynski, Michal; Wojciechowski, Krzysztof; Matacz, Zygmunt; Makosza, Mieczyslaw
CS Inst. Org. Chem. Technol., Tech. Univ. Warsaw, Warsaw, Pol.
SO Journal of Organic Chemistry (1978), 43(24), 4682-4
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
AB Anhydrous K2CO3 and Na2CO3 in the presence of tetraalkylammonium salts or crown ethers were efficient strong bases for the generation and reactions of carbanions. The following reactions were accomplished: (1) alkylation of di-Et malonate, Me cyanoacetate, and Et acetoacetate; (2) alkylation and nitroarylation of 9-substituted fluorenes and diphenylacetaldehyde; (3) alkylation of phenylacetonitrile; (4) acylation of 2-phenylalkanenitrile; (5) Michaelis-Becker alkylation of di-Et phosphate; (6) Darzens condensation; (7) dibromocarbene generation; (8) **Williamson** ether synthesis.

=> d l14 1-9 ti

L14 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthesis and properties of amphiphilic copolymers of butyl acrylate and methyl methacrylate with uniform polyoxyethylene grafts

L14 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for carrying out a **solid-liquid** reaction

L14 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Quantum simulations of **solids, liquids,** and nanostructures

L14 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthesis of phenolic ethers in heterogeneous media: **solid-liquid,** liquid-liquid or in the presence of microwaves

L14 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Selective etherification of hydroxylated polyoxyalkylenes in the absence of solvent

L14 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Characteristics of multiblock styrene-butadiene-oxyethylene copolymers containing polyoxyethylene

L14 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI A novel procedure for the synthesis of ether-bridged perfluoro non-ionic surfactants

L14 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Improved and simplified synthesis of aryl ethers by alkylation of phenolate ions. **Solid-liquid** phase-transfer catalysis in the absence of organic solvents

L14 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxycyclohexanol

=> d l14 2,4,5,8,9 ti fbib abs

L14 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for carrying out a **solid-liquid** reaction
AN 2003:202537 CAPLUS

DN 138:223603
TI Method for carrying out a **solid-liquid** reaction
IN Klopp, Ingo; Bogenstaetter, Thomas; Franke, Dirk; Munzinger, Manfred
PA Basf Aktiengesellschaft, Germany
SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003020411	A1	20030313	WO 2002-EP9659	20020829
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
			DE 2001-10142284	A 20010829
DE 10142284	A1	20030320	DE 2001-10142284	20010829
TW 592829	B	20040621	TW 2002-91119416	20020827
			DE 2001-10142284	A 20010829
CA 2458812	AA	20030313	CA 2002-2458812	20020829
			DE 2001-10142284	A 20010829
			WO 2002-EP9659	W 20020829
EP 1423187	A1	20040602	EP 2002-767452	20020829
EP 1423187	B1	20050302		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
			DE 2001-10142284	A 20010829
			WO 2002-EP9659	W 20020829
BR 2002012168	A	20040720	BR 2002-12168	20020829
			DE 2001-10142284	A 20010829
			WO 2002-EP9659	W 20020829
NZ 531344	A	20041029	NZ 2002-531344	20020829
			DE 2001-10142284	A 20010829
			WO 2002-EP9659	W 20020829
JP 2005501695	T2	20050120	JP 2003-524713	20020829
			DE 2001-10142284	A 20010829
			WO 2002-EP9659	W 20020829
AT 289864	E	20050315	AT 2002-767452	20020829
			DE 2001-10142284	A 20010829
			WO 2002-EP9659	W 20020829
US 2004204605	A1	20041014	US 2004-487214	20040219
			DE 2001-10142284	A 20010829
			WO 2002-EP9659	W 20020829

AB A **solid-liquid** reaction is carried by (1) preparation of a reaction suspension containing a 1st reactant which is suspended and a 2nd reactant which is dissolved in a suspension medium, whereby 1 of the reaction products is insol. in the suspension medium, (2) feeding the reaction suspension through a longish reaction zone, whereby the Reynolds number of the flow <20,000, and (3) separation of the insol. reaction product. The method is advantageous in that the insol. reaction product is obtained in a form which is easy to filter. The method is especially suitable for manufacture of (PhCO2)3P by reacting PhCO2Na or PhCO2NH4 with PCl3.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthesis of phenolic ethers in heterogeneous media: **solid-liquid**, liquid-liquid or in the presence of microwaves
AN 1998:636409 CAPLUS
DN 129:316001
TI Synthesis of phenolic ethers in heterogeneous media: **solid-liquid**, liquid-liquid or in the presence of microwaves
AU Bratulescu, George; Le Bigot, Yves; Delmas, Michel; Pogany, Iuliu
CS Unite Recherche:Fibres, Energie, Biomonomeres, Institut National Polytechnique Toulouse, Ecole Nationale Superieure Chimie, Toulouse, 31077, Fr.
SO Revue Roumaine de Chimie (1998), 43(4), 321-326
CODEN: RRCHAX; ISSN: 0035-3930
PB Editura Academiei Romane
DT Journal
LA French
AB RC6H4CH2OC6H4R1 [R = 4-Cl, 2-Cl, 4-Br, 4-F, 4-Me, H; R1 = H, 3-Me, 2-Me, 4-Me, 4-NO2] were obtained in excellent yields by **Williamson** reaction of RC6H4CH2Cl with HOC6H4R1 in a heterogeneous medium, i.e., using K2CO3 in a solvent or using aqueous KOH and Aliquat 336 as phase transfer catalyst or aqueous KOH and microwave heating.
RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Selective etherification of hydroxylated polyoxyalkylenes in the absence of solvent
AN 1996:376451 CAPLUS
DN 125:59332
TI Selective etherification of hydroxylated polyoxyalkylenes in the absence of solvent
AU Abribat, B.; Le Bigot, Y.; Gaset, A.
CS Lab. Chimie Agro-Industrielle, Toulouse, 31077, Fr.
SO Tetrahedron (1996), 52(24), 8245-8256
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier
DT Journal
LA French
AB The **Williamson** reaction, realized in a biphasic **solid/liquid**, slightly hydrated medium, allows the selective transformation of primary or secondary polyoxyalkylenes alc. functions, under simple and economical conditions: no solvent and ambient temperature The use of KOH catalyst for dialkylation of polypropylene glycol employing various alkyl halides is illustrated.

L14 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Improved and simplified synthesis of aryl ethers by alkylation of phenolate ions. **Solid-liquid** phase-transfer catalysis in the absence of organic solvents
AN 1988:509936 CAPLUS
DN 109:109936
TI Improved and simplified synthesis of aryl ethers by alkylation of phenolate ions. **Solid-liquid** phase-transfer catalysis in the absence of organic solvents
AU Loupy, Andre; Sansoulet, Jean; Vaziri-Zand, Farchid
CS Lab. React. Select. Supports, Univ. Paris-Sud, Orsay, 91405, Fr.
SO Bulletin de la Societe Chimique de France (1987), (6), 1027-35
CODEN: BSCFAS; ISSN: 0037-8968
DT Journal
LA French
OS CASREACT 109:109936
AB Aryl ethers are obtained in excellent yields under mild and economical

conditions in the absence of organic solvents by the reaction of stoichiometric amts. of phenols, finely ground KOH, and alkyl bromides in the presence of 2% Aliquat 336. E.g., p-MeCOC6H4OH reacts with Me(CH2)7Br under these conditions to give 97% p-MeCOC6H4O(CH2)7Me.

L14 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxycyclohexanol
AN 1986:442606 CAPLUS
DN 105:42606
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxycyclohexanol
AU Depreux, P.; Marcincal-Lefebvre, A.
CS Lab. Chim. Org., Fac. Pharm. Lille, Lille, 59045, Fr.
SO Canadian Journal of Chemistry (1986), 64(3), 626-32
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA French
OS CASREACT 105:42606
AB Amino ethers of trans-2-phenoxycyclohexanol were prepared by methods involving anhydrous conditions (sodium alkoxides in xylene) or phase transfer catalysis (PTC) conditions (liquid-liquid or **solid-liquid** two-phase systems). In the liquid-liquid two-phase system, when no catalyst was added, the reaction proceeds with comparable or even better yields than with some PTC catalysts, a quaternary salt being formed in situ. The deprotonation of the alc. takes place at the interface, since there was no OH- extraction in organic medium and the yield depends on the stirring speed. In the presence of aliquat, the yield does not change with the organic concentration of the catalyst. Statistical correlations obtained between the variations in yield and several other parameters were good.

=> d cost

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
CONNECT CHARGES	14.43	14.95
NETWORK CHARGES	2.22	2.34
SEARCH CHARGES	20.79	20.79
DISPLAY CHARGES	70.10	70.10
FULL ESTIMATED COST	107.54	108.18

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.14	-13.14

IN FILE 'CAPLUS' AT 07:47:16 ON 10 JUN 2005

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	109.34	109.98

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.14	-13.14

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:49:46 ON 10 JUN 2005

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Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 08:32:46 ON 10 JUN 2005
FILE 'CAPLUS' ENTERED AT 08:32:46 ON 10 JUN 2005
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                  109.34     109.98

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                  -13.14     -13.14

=> d his

     (FILE 'HOME' ENTERED AT 07:24:59 ON 10 JUN 2005)

     FILE 'REGISTRY' ENTERED AT 07:25:10 ON 10 JUN 2005

     FILE 'CAPLUS' ENTERED AT 07:25:16 ON 10 JUN 2005
L1         27615 SOLID LIQUID
L2         20709 LIQUID SOLID
L3         43992 L1 OR L2
L4       3753322 REACTION
L5          4694 L3(L)L4
L6       1199985 ETHER OR ESTER
L7         24236 ACID ANHYDRIDE
L8       1214708 L6 OR L7
L9           323 L8 AND L5
L10          215 L8(L)L5
L11      1102160 SALT
L12           52 L10 AND L11
L13         1323 WILLIAMSON
L14           18 L3 AND L13

=> logoff hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                  110.24     110.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                  -13.14     -13.14

 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:33:49 ON 10 JUN 2005

Connecting via Winsock to STN



Welcome to STN International!  Enter x:x
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LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 08:37:59 ON 10 JUN 2005
FILE 'CAPLUS' ENTERED AT 08:37:59 ON 10 JUN 2005
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   110.24     110.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -13.14     -13.14

=> d his

     (FILE 'HOME' ENTERED AT 07:24:59 ON 10 JUN 2005)

     FILE 'REGISTRY' ENTERED AT 07:25:10 ON 10 JUN 2005

     FILE 'CAPLUS' ENTERED AT 07:25:16 ON 10 JUN 2005
L1         27615 SOLID LIQUID
L2         20709 LIQUID SOLID
L3         43992 L1 OR L2
L4       3753322 REACTION
L5          4694 L3(L)L4
L6       1199985 ETHER OR ESTER
L7         24236 ACID ANHYDRIDE
L8       1214708 L6 OR L7
L9           323 L8 AND L5
L10          215 L8(L)L5
L11      1102160 SALT
L12           52 L10 AND L11
L13         1323 WILLIAMSON
L14           18 L3 AND L13

=> cake
          33594 CAKE
           8469 CAKES
L15       37917 CAKE
                (CAKE OR CAKES)

=> l5 and l15
L16          49 L5 AND L15

=> d l16 39-49

L16  ANSWER 39 OF 49  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   1975:75831  CAPLUS
DN   82:75831
TI   One-stage ammonia leaching of molybdic acid
AU   Gizatulina, R. A.; Bershitskii, A. A.; Khavskii, N. N.; Kal'kov, A. A.;
     Shmalei, B. N.; Zakarchevnyi, D. I.
CS   USSR
SO   Sbornik - Moskovskii Institut Stali i Splavov (1974), 77, 75-8
     CODEN: SMSSAK; ISSN: 0371-1242
DT   Journal
LA   Russian

L16  ANSWER 40 OF 49  CAPLUS  COPYRIGHT 2005 ACS on STN
```

AN 1972:45678 CAPLUS
DN 76:45678
TI Oxalic acid. IV. Decomposition of calcium oxalate with sulfuric acid
AU Sasaki, Eiichi
CS Ofuna Tech. Serv. Lab., Mitsui Toatsu Chem. Inc., Yokohama, Japan
SO Kogyo Kagaku Zasshi (1971), 74(12), 2426-9
CODEN: KGKZA7; ISSN: 0368-5462
DT Journal
LA Japanese

L16 ANSWER 41 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1972:5765 CAPLUS
DN 76:5765
TI Mechanism of alkali reaction with bauxite charge components
AU Feshchenko, Z. I.; Skobeev, I. K.; Kuz'mina, G. V.
CS USSR
SO Obogashch. Met. Polez. Iskop. (1970) 75-6
From: Ref. Zh., Met. 1971, Abstr. No. 4G145
DT Journal
LA Russian

L16 ANSWER 42 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1971:114670 CAPLUS
DN 74:114670
TI Behavior of niobium and tantalum under alkaline decomposition of zircono-pyrochlore concentrate
AU Fedoryako, L. I.; Sheka, I. A.; Bogushevskaya, R. P.
CS USSR
SO Fiz.-Khim. Osn. Razlozh. Alyumosilikat. Gidrokhim. Metod. (1969) 154-9
From: Ref. Zh., Met. 1969, Abstr. No. 11G245
DT Journal
LA Russian

L16 ANSWER 43 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1969:117231 CAPLUS
DN 70:117231
TI Alkaline processing of some uranium ores
AU Bunus, Fl.; Matei, Ilie; Sporea, V.
SO Revistade Chimie (Bucharest, Romania) (1969), 20(1), 19-24
CODEN: RCBUAU; ISSN: 0034-7752
DT Journal
LA Romanian

L16 ANSWER 44 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1967:413999 CAPLUS
DN 67:13999
TI Pilot-plant tests of chlorine-soda leaching of low-grade molybdenum-bearing products
AU Khryashchev, S. V.; Kozlovskaya, E. M.
SO Tsvetnye Metally (Moscow, Russian Federation) (1967), 40(2), 13-16
CODEN: TVMTAX; ISSN: 0372-2929
DT Journal
LA Russian

L16 ANSWER 45 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1966:73909 CAPLUS
DN 64:73909
OREF 64:13816c-e
TI Formation of a new technology of production of antimony and its compounds
AU Batyuk, A. G.; Valiulin, R. G.; Lobanov, V. A.; Pak, N. T.
SO Khim. i Tekhnol. Sur'my, Akad. Nauk Kirg. SSR, Inst. Neorgan. i Fiz., Khim. (1965) 107-26
DT Journal

LA Russian

L16 ANSWER 46 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1964:400487 CAPLUS
DN 61:487
OREF 61:72b-c
TI Oxidation of cobalt with black nickel hydroxides in the process of reprecipitation of cobalt-nickel **cakes**
AU Gran, T. V.
SO Zhurnal Prikladnoi Khimii (Sankt-Peterburg, Russian Federation) (1964), 37(3), 487-92
CODEN: ZPKHAB; ISSN: 0044-4618
DT Journal
LA Unavailable

L16 ANSWER 47 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1954:34402 CAPLUS
DN 48:34402
OREF 48:6150a-b
TI Solid surface-active agents
IN Birch, Stanley F.; Harbourn, Charles L. A.; Desty, Dennis H.
PA Anglo-Iranian Oil Co. Ltd.
DT Patent
LA Unavailable
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 697315		19530923	GB	

L16 ANSWER 48 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1947:25428 CAPLUS
DN 41:25428
OREF 41:5067a-h
TI Treatment of polymetallic ores and concentrates by the sulfatization method
AU Gromov, B. V.; Derkachev, D. I.
SO Tsvetnye Metally (Moscow, Russian Federation) (1947), 20(No. 1), 27-39
CODEN: TVMTAX; ISSN: 0372-2929
DT Journal
LA Unavailable

L16 ANSWER 49 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1915:11454 CAPLUS
DN 9:11454
OREF 9:1811d-h
TI Investigations on fatty fruits and seeds of our (German) colonies. IV. Canarium polyphyllum
AU Wagner, H.; Lampart, B.
CS Duisberg
SO Zeitschrift fuer Untersuchung der Nahrungs- und Genussmittel sowie der Gebrauchsgegenstaende (1915), 29, 105-11
CODEN: ZNGEA2; ISSN: 0372-9419
DT Journal
LA Unavailable

=> l8 and l16
L17 3 L8 AND L16

=> d l17 1-3 ti

L17 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of di-methyl trans-1,4-cyclohexanedicarboxylate

L17 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
TI Purification of naphthalenedicarboxylic acid dialkyl **esters**

L17 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solid surface-active agents

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	126.99	127.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.14	-13.14

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FULL ESTIMATED COST	126.99	127.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	FEB 25	CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered
NEWS	4	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	5	FEB 28	BABS - Current-awareness alerts (SDIs) available
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NEWS	10	MAR 22	KOREAPAT now updated monthly; patent information enhanced
NEWS	11	MAR 22	Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS	12	MAR 22	PATDPASPC - New patent database available
NEWS	13	MAR 22	REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS	14	APR 04	EPFULL enhanced with additional patent information and new fields
NEWS	15	APR 04	EMBASE - Database reloaded and enhanced
NEWS	16	APR 18	New CAS Information Use Policies available online
NEWS	17	APR 25	Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAplus and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.
NEWS	18	APR 28	Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAplus
NEWS	19	MAY 23	GBFULL enhanced with patent drawing images
NEWS	20	MAY 23	REGISTRY has been enhanced with source information from CHEMCATS
NEWS	21	MAY 26	STN User Update to be held June 6 and June 7 at the SLA 2005 Annual Conference
NEWS	22	JUN 06	STN Patent Forums to be held in June 2005
NEWS	23	JUN 06	The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 10:38:05 ON 10 JUN 2005

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=> logoff hold
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

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COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

=> file caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

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FILE COVERS 1907 - 10 Jun 2005  VOL 142 ISS 25
FILE LAST UPDATED: 9 Jun 2005  (20050609/ED)

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  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

=> column(l) derivatization
        382821 COLUMN
         99435 COLUMNS
        431756 COLUMN
                  (COLUMN OR COLUMNS)
         22733 DERIVATIZATION
           336 DERIVATIZATIONS
```

```
         22932 DERIVATIZATION
                 (DERIVATIZATION OR DERIVATIZATIONS)
L1        5953 COLUMN(L) DERIVATIZATION

=> ether or ester
        461819 ETHER
        141927 ETHERS
        520226 ETHER
                 (ETHER OR ETHERS)
        562068 ESTER
        419051 ESTERS
        784851 ESTER
                 (ESTER OR ESTERS)
L2     1199985 ETHER OR ESTER

=> l1 and l2
L3         732 L1 AND L2

=> liquid solid or solid liquid
        684284 LIQUID
        122774 LIQUIDS
        777118 LIQUID
                 (LIQUID OR LIQUIDS)
        953591 LIQ
         90892 LIQS
        988991 LIQ
                 (LIQ OR LIQS)
       1369240 LIQUID
                 (LIQUID OR LIQ)
        963770 SOLID
        273646 SOLIDS
       1165923 SOLID
                 (SOLID OR SOLIDS)
         20709 LIQUID SOLID
                 (LIQUID(W)SOLID)
        963770 SOLID
        273646 SOLIDS
       1165923 SOLID
                 (SOLID OR SOLIDS)
        684284 LIQUID
        122774 LIQUIDS
        777118 LIQUID
                 (LIQUID OR LIQUIDS)
        953591 LIQ
         90892 LIQS
        988991 LIQ
                 (LIQ OR LIQS)
       1369240 LIQUID
                 (LIQUID OR LIQ)
         27615 SOLID LIQUID
                 (SOLID(W)LIQUID)
L4        43992 LIQUID SOLID OR SOLID LIQUID

=> l3 and l4
L5            4 L3 AND L4

=> d l5 1-4 ti

L5   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Fatty acid derivatives as potential phase change materials

L5   ANSWER 2 OF 4  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Solid-phase derivatization reactions for biomedical liquid chromatography
```

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chromatographic determination of bile acids in biological fluids with sensitive and selective detection

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
TI Enantiospecific high-performance liquid chromatographic (HPLC) determination of baclofen and its fluoro analog in biological material

=> d l5 2 ti fbib abs

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solid-phase derivatization reactions for biomedical liquid chromatography
AN 1994:649981 CAPLUS
DN 121:249981
TI Solid-phase derivatization reactions for biomedical liquid chromatography
AU Krull, I. S.; Szulc, M. E.; Bourque, A. J.; Zhou, F.-X.; Yu, J.; Strong, R.
CS Department of Chemistry, 102 Hurtig Building, Northeastern University, 360 Huntington Avenue, Boston, MA, 02115, USA
SO Journal of Chromatography, B: Biomedical Applications (1994), 659(1+2), 19-50
CODEN: JCBBEP; ISSN: 0378-4347
PB Elsevier
DT Journal; General Review
LA English
AB A review with 116 refs. Polymeric reagents have been developed for performing off- and online **derivatizations** of numerous organic analytes in HPLC-detection modes. Such reagents utilize ionic or covalent attachment of labile tags that possess specific detector enhancement properties: UV, electrochem., fluorescence, and so forth. Specific synthetic procedures have evolved to generate various linkages of the tag to the underlying, polymeric support, usually involving activated **ester** connections (leashes). The polymer itself may play a number of roles in the nature of the overall reactions, such as hydrophobic-hydrophilic exclusion, pore size restriction, stabilization of the attachment leashes, and protection of the tags from hydrolysis in aqueous media. The basic, underlying chemical of polymeric reagents has evolved to the point where it is possible to engineer the polymer support itself, the attachment leash, and the various tags that are then transferred to the analyte mols. These procedures have now reached the stage of commercialization and practical applicability for real-world drugs and bioorgs. in complex biofluid type samples. Polymer supported reagents can now be used for direct injection of biofluids with solid-phase (hydrophobic) extraction of the analytes of interest, followed by sample cleanup, **derivatization**, elution onto the HPLC **column**, peak compression, gradient HPLC elution, multiple detection, and final data interpretation with quantitation. This review summarizes much or most of what has been described in the scientific literature over the past decade in the various areas where polymeric reagents are being used for **derivatization** in HPLC and in capillary electrophoresis as well.

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	20.85	21.06

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.73	-0.73

```
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   21.30      21.51

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -0.73      -0.73

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   21.30      21.51

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -0.73      -0.73

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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES:    9 JUN 2005  HIGHEST RN 852020-24-7
DICTIONARY FILE UPDATES:   9 JUN 2005  HIGHEST RN 852020-24-7

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*********************************************************************
*                                                                   *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                   *
*********************************************************************

Crossover limits have been increased.  See HELP CROSSOVER for details.
```

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

```
=> e tribenzoylphosphite/cn
E1            1     TRIBENZOYLPHOSPHIDE/CN
E2            1     TRIBENZOYLPHOSPHINE/CN
E3            0 --> TRIBENZOYLPHOSPHITE/CN
E4            1     TRIBENZPORPHIN/CN
E5            1     TRIBENZYL (1.FWDARW.6)-A-GALACTAN/CN
E6            1     TRIBENZYL (1.FWDARW.6)-A-GLUCAN/CN
E7            1     TRIBENZYL (1.FWDARW.6)-A-MANNAN/CN
E8            1     TRIBENZYL 1,2,3-BUTANETRICARBOXYLATE/CN
E9            1     TRIBENZYL BORATE/CN
E10           1     TRIBENZYL CIS,CIS-1,3,5-TRIMETHYLCYCLOHEXANE-1,3,5-TRICARBOX
                    YLATE/CN
E11           1     TRIBENZYL CITRATE/CN
E12           1     TRIBENZYL ISOCYANURATE/CN

=> e tribenzoyl phosphite/cn
E1            1     TRIBENZOYL BORATE/CN
E2            1     TRIBENZOYL GLYCEROL ESTERASE/CN
E3            1 --> TRIBENZOYL PHOSPHITE/CN
E4            1     TRIBENZOYL-A-L-RHAMNOPYRANOSYL BROMIDE/CN
E5            1     TRIBENZOYL-4,5-TRANS-EPOXYSPHINGOSINE/CN
E6            1     TRIBENZOYL-4-AMINOPHENOL/CN
E7            1     TRIBENZOYLCYCLOPROPANE/CN
E8            1     TRIBENZOYLENEBENZENE/CN
E9            1     TRIBENZOYLHYDRAZINE/CN
E10           1     TRIBENZOYLLEVOGLUCOSAN/CN
E11           1     TRIBENZOYLMETHANE/CN
E12           1     TRIBENZOYLPHOSPHIDE/CN

=> e3
L6            1 "TRIBENZOYL PHOSPHITE"/CN

=> d l6

L6   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   54862-45-2  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Benzoic acid, trianhydride with phosphorous acid (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Benzoic acid, anhydride with phosphorous acid (7CI)
OTHER NAMES:
CN   Tribenzoyl phosphite
FS   3D CONCORD
MF   C21 H15 O6 P
LC   STN Files:   BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
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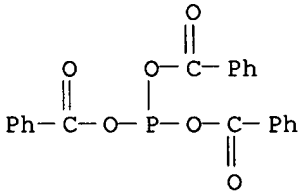

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8 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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0 FILE
0 CAPLUS
L7 0 \FILE CAPLUS
(FILE(W)CAPLUS)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	16.50	38.01

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FILE COVERS 1907 - 10 Jun 2005 VOL 142 ISS 25
FILE LAST UPDATED: 9 Jun 2005 (20050609/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l6/prep
8 L6
3314614 PREP/RL
L8 5 L6/PREP
(L6 (L) PREP/RL)

=> d l8 1-5 ti

L8 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for producing ethers, esters or acid anhydrides especially for preparing tribenzoyl phosphite from ammonium benzoate and phosphorous chloride including separation of the ammonium chloride

L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for carrying out a solid-liquid reaction

L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for producing α-aminophosphonic acids by the reaction of hexahydro triazine derivative with triorgano phosphate

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Kinetics of the acetylation of arylamines in acetic acid in the presence of phosphorus trichloride and triethylamine

L8 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Di- and tricarboxyphosphines

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	6.19	44.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.73

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